

Remarks/Arguments:

Claims 1-7 are pending in the instant application. In the Office Action dated November 3, 2003, the Examiner has rejected claim 3 under 35 U.S.C. § 112, second paragraph, as indefinite (i.e., one term lacking antecedent basis). The Examiner has further rejected claim 1 under 35 U.S.C. § 102 as being anticipated by U.S. Patent No. 6,031,826 to Hassan (hereinafter, Hassan), and has rejected claim 2 as depending from a rejected base claim. The Examiner has further allowed claims 5-7. Applicant will address the objections/rejections in the order advanced in the Office Action. Applicant has rewritten claim 2 in independent form to better isolate the objections and rejections, and stipulates the change to claim 2 is merely a change in form that does not narrow the claim's scope.

1. Rejections under 35 U.S.C. § 112:

Claim 3 is herein amended to replace the term "the same time slot" to "a same time slot", the latter not requiring antecedent basis. While the Office Action noted in ¶5 that claim 4 would be allowable if rewritten to overcome an indefiniteness rejection, no specifics of that rejection were recited at ¶3, and the Applicant finds no lack of definiteness. Specifically, the terms "bursts" and "base stations" find antecedent basis in claim 2, from which claim 4 depends. Applicant respectfully requests the Examiner more particularly point out the indefinite language or withdraw the objection to claim 4.

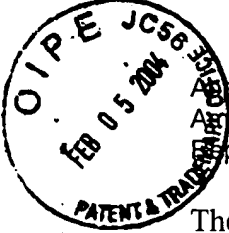
2. Rejection under 35 U.S.C. § 102:

Hassan is directed to a method and system for transmitting control information such as using a fast-associated control channel (FACCH) in a TDMA system. Hassan describes at col. 4, line 61 to col. 5, line 7, a satellite TDMA superframe structure including 16 traffic slots in each of twelve frames and 16 SACCH slots in a thirteenth frame, as in Figure 4. The Office Action likens frame I of Hassan's standard superframe structure (as in Figure 1) with the common idle frame of claim 1. Applicant reads Hassan as teaching that the idle frame is used for control messages sent over the SACCH. As stated at col. 4, line 61 to col. 5, line 7: "Each SACCH slot is associated with a corresponding traffic slot. To provide one SACCH per each traffic slot, the SACCH frame is combined with the idle frame to make a 16-slot SACCH frame." This appears consistent with Figure 4 of Hassan, wherein frames F1-F12 are traffic frames and

frame 13 carries the SACCH (as opposed to Figure 1 wherein only frame 26 carries the SACCH).

Applicant submits that Hassan fails to anticipate claim 1 for at least two reasons. First, claim 1 recites that idle frame transmissions are arranged without regard to assigned traffic time slot. Hassan at col. 4, lines 64-65 explicitly ties a timeslot of the SACCH frame (frame 13 of Figure 4) with a corresponding traffic slot, exactly the opposite of claim 1. Second, using an idle frame for SACCH messages makes it no longer an idle frame as recited in claim 1, but a frame carrying dedicated traffic channels indistinguishable from frame 26 of Hassan's Figure 1. Claim 1 arranges transmissions within an idle frame; Hassan appears to wholly convert a common idle frame to a SACCH frame ("the SACCH frame is combined with the idle frame to make a 16-slot SACCH frame"). Specifically, the 16-slot SACCH frame is divided into slots to match the sixteen traffic channels, each slot of the 16-slot SACCH frame is associated with a corresponding traffic slot, and during any particular slot of the 16-slot SACCH frame, control messages are sent to an individual mobile station rather than messages being broadcast to all mobile stations. Applicant contends that, despite being created from what was once an idle frame, Hassan's 16-slot SACCH frame is merely another frame carrying traffic channels and therefore does not anticipate an idle frame as in claim 1.

Hassan itself seems to bear this out. At Figure 1, Hassan shows a frame I (frame 13) that is explicitly noted as an idle frame at col. 1, lines 27-28, and a separately labeled SACCH frame (frame 26). Hassan describes Figure 1 at col. 3, lines 24-25, as the standard superframe structure, and details it in the background section. Conversely, only a SACCH frame (the 13th frame) is shown in Hassan's Figure 4, which is described at col. 3, lines 31-33 as a superframe structure according to one embodiment of the Hassan invention. Were an idle frame present in Figure 4, one would expect it to be labeled consistently with the idle frame of Figure 1. Applicant submits that, rather than an inconsistency in Hassan's Figures, the above mis-match indicates that the idle frame of Figure 1 been completely supplanted with the SACCH and no longer exists in Figure 4.




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The broader teachings of Hassan also do not appear to lead one of ordinary skill to the invention of claim 1. Specifically, Hassan is directed to the problem of frame stealing when FACCH is sent (col. 2, line 53 to col. 3, line 6), whereas the present invention is directed to the problem of synchronization (page 2, line 21 to page 3, line 4). Also, Hassan is generally directed toward frames of control data (col. 6, lines 5-19 and all claims), and transmissions directed to specific mobile stations via dedicated FACCHs or SACCHs. Conversely, the present invention, as recited in claim 1, is broadly directed toward using a subset of timeslots of a common idle frame.

Applicant submits that the above detailed arguments successfully traverse each and every outstanding rejection. Applicant respectfully requests that the Examiner withdraw the rejection to claim 1 and the objections to claims 2-4, and pass claims 1-7 to issuance without further delay. Should any issues remain unresolved, especially under 35 U.S.C. §112, the undersigned representative invites the Examiner to discuss them via teleconference.

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February 3, 2004
Date


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